

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application

Listing of Claims

1. (Currently Amended) A dishwasher having a cavity, ~~where steam is created,~~ enclosed in part by a side and a fan motor for driving a fan via a rotational shaft, each of which are installed at an upper point of the cavity side, for generating a suction force to discharge the steam from the cavity through the upper point of the cavity side via a steam discharger, the steam discharger comprising:

a fan housing, ~~enclosing the fan motor and fan, for guiding the steam discharged~~ by an operation of the fan motor, ~~said fan housing~~ having a steam intake port ~~communicating in communication with the~~ a cavity of the dishwasher and a steam exhaust port ~~penetrating which~~ penetrates a side of the cavity side, wherein the fan housing is configured to receive a fan and a fan motor therein, and to guide steam from the cavity out through the steam exhaust port;

an intake port cover, ~~movably installed within said the fan housing, for opening and closing wherein the intake port cover is configured to open and close the steam intake port of said the fan housing;~~ and

~~coupling means, linking said~~ a coupler configured to link the intake port cover with ~~the a rotational shaft of the fan motor, for transferring the and to transfer a driving force of the fan motor to said the intake port cover so as to selectively open and close the steam intake port of said the fan housing.~~

2. (Currently Amended) The dishwasher ~~as claimed in~~ of claim 1, wherein the steam intake port of ~~said the~~ fan housing ~~opens~~ is configured to be open during ~~a performance of a~~ drying step ~~by the dishwasher operation~~ and ~~closes to be closed~~ during ~~a performance of~~ washing and rinsing steps ~~by the dishwasher operations~~.

3. (Currently Amended) The dishwasher ~~as claimed in~~ of claim 1, wherein ~~said the~~ intake port cover has a central shaft ~~for linking with~~ that is linked to the rotational shaft of the fan motor via the coupler.

4. (Currently Amended) The dishwasher ~~as claimed in~~ of claim 3, wherein ~~said the~~ fan housing ~~is provided with~~ includes a through-hole, ~~disposed~~ in opposition to the steam intake port, and wherein the central shaft of ~~said the~~ intake port cover extends through the through-hole of ~~said the~~ fan housing so as to link with to the rotational shaft of the fan motor via the coupler.

5. (Currently Amended) The dishwasher ~~as claimed in~~ of claim 3, ~~the coupling means comprising~~ wherein the coupler comprises:

a spring, ~~installed~~ on an outer circumference of the rotational shaft of the fan motor, so as to be elastically supported by the fan motor;

a push ring, ~~installed~~ movably installed along the rotational shaft of the fan motor, ~~for compressing said~~ and configured to compress the spring;

a push member, ~~hinge-coupled with to~~ the rotational shaft of the fan motor, ~~for pressing said~~ and configured to press the push ring when the rotational shaft of the fan motor is driven; and

a linking rod having a first end supported by ~~said the~~ push ring, a second end coupled to a distal end of the central shaft of ~~said the~~ intake port cover, and a leverage point hinge-coupled to ~~said the~~ fan housing ~~so such that when, said push ring compresses said spring,~~ said intake port cover opens said movement of the push ring against the bias of the spring causes the steam intake port to open.

6. (Currently Amended) The dishwasher ~~as claimed in~~ of claim 5, wherein, when the fan motor is not rotating, and ~~said the~~ spring is in a static state, ~~said the~~ intake port cover closes ~~said the~~ steam intake port.

7. (Currently Amended) The dishwasher ~~as claimed in~~ of claim 5, ~~said wherein the~~ push ring ~~comprising~~ comprises:

a hollow body, ~~fitted over the rotational shaft of the fan motor,~~ and having a first end abutting ~~said a~~ corresponding end of the spring; and

an annular flange, ~~formed on a second end of said the~~ hollow body, ~~said wherein~~ the annular flange providing includes a first surface configured to catch the first end of said the linking rod and a second surface ~~in configured to contact with said the~~ push member.

8. (Currently Amended) The dishwasher ~~as claimed in~~ of claim 5, said wherein the
~~push member comprising comprises:~~

a skewed hollow shaft, ~~disposed~~ at a first predetermined angle with respect to the
rotational shaft of the fan motor and hinge-coupled to the rotational shaft of the fan motor at a
second predetermined angle so as to movably rotate against the rotational shaft; and

a pair of pivoting arms each extending perpendicularly from a perpendicular to an
outer circumferential surface of said the skewed hollow shaft.

9. (Currently Amended) The dishwasher ~~as claimed in~~ of claim 8, wherein an inner
diameter dimension of ~~said the~~ skewed hollow shaft is greater than an outer diameter dimension
of the rotational shaft of the fan motor, ~~depending and wherein the inner diameter dimension of~~
the skewed hollow shaft is based on the second predetermined angle of said at which the skewed
hollow shaft is hinge-coupled to the rotational shaft of the fan motor.

10. (New) A dishwasher having a cavity where steam is generated, and a fan motor
for driving a fan via a rotational shaft to discharge steam from the cavity, comprising:

a fan housing, enclosing the fan motor and fan, the fan housing having a steam
intake port communicating with the cavity and a steam exhaust port penetrating the side of the
cavity;

an intake port cover, movably installed within the fan housing, for opening and
closing the steam intake port of the fan housing; and

coupling means, linking the intake port cover with the rotational shaft of the fan motor, for transferring the driving force of the fan motor to the intake port cover to selectively open and close the steam intake port of the fan housing, wherein the intake port cover has a central shaft for linking with the rotational shaft of the fan motor.

11. (New) The dishwasher of claim 10, wherein the coupling means comprises:
- a push ring movably installed along the rotational shaft of the fan motor;
 - a push member rotatably coupled to the rotational shaft of the fan motor so as to push the push ring when the rotational shaft of the fan motor is driven; and
 - a linking rod having a first end supported by the push ring, a second end coupled to the central shaft of the intake port cover, and a leverage point coupled to the fan housing such that axial movement of the push ring causes the intake port cover to open the steam intake port.

12. (New) The dishwasher of claim 11, further comprising a biasing member mounted on the rotational shaft of the fan motor and configured such that axial movement of the push ring compresses the biasing member.

13. (New) The dishwasher of claim 12, wherein the push ring comprises:
- a hollow body positioned around the rotational shaft of the fan motor, with a first end thereof positioned adjacent the biasing member; and

an annular flange formed on a second end of the hollow body, wherein a first surface of the annular flange is configured to engage the first end of the linking rod and a second surface of the annular flange is configured to contact the push member.

14. (New) The dishwasher of claim 11, wherein the push member comprises;
- a skewed hollow shaft rotatably coupled to the rotational shaft of the fan motor so as to rotate with respect to the rotational shaft; and
 - a pair of pivoting arms extending perpendicularly from an outer circumferential surface of the skewed hollow shaft.

15. (New) A dishwasher having a fan configured to discharge steam from a wash cavity of the dishwasher, comprising:

- a fan housing with a steam intake port and a steam exhaust port;
- a fan mounted in the housing and configured to draw steam from the cavity into the steam intake port and to exhaust steam out through the exhaust port; and
- an intake port cover that is configured to selectively open and close the intake port, wherein the intake port cover is coupled to the fan such that rotation of the fan causes the intake port to move to an open position.

16. (New) The dishwasher of claim 15, further comprising a push ring mounted on a rotational shaft of the fan, wherein rotation of the fan causes the push ring to move axially along

the rotational shaft, and wherein axial movement of the push ring cause the intake port cover to move between the open and closed positions.

17. (New) The dishwasher of claim 16, further comprising a linking rod coupled between the push ring and the exhaust port cover, wherein the linking rod is configured such that axial movements of the push ring case the exhaust port cover to move between the open and closed positions.

18. (New) The dishwasher of claim 17, further comprising a biasing member mounted on the rotational shaft of the fan and configured to bias the push ring into a closed position when the fan is not rotation.

19. (New) The dishwasher of claim 17, further comprising a lever member coupled to the rotational shaft of the fan and configured such that when the fan operates, the lever member causes the push ring to move axially.